WHAT IS CLAIMED IS:

1. In a receiver that recovers a digital VSB signal, a method for detecting the phase of the recovered digital signal comprising:

forming from the recovered digital signal a first data stream and a second data stream comprising a Hilbert Transform pair;

generating a third data stream that represents tentative decisions from the first data stream;

comparing the first and third data streams to generate a symbol error signal;

combining the symbol error signal and the second data stream to form a phase error signal; and

coupling the phase error signal to a VCO to reduce the phase error signal.

2. The method of claim 1, in which the symbol error signal is delayed before combination with the second data stream.

3. The method of claim 2, additionally comprising equalizing the third data stream and combining the equalized third data stream with the first data stream prior to generating the third data stream.

4 The method of claim 1, additionally comprising equalizing the third data stream and combining the equalized third data stream with the first data stream prior to generating the third data stream.

5. The method of claim 4, in which the second data stream is delayed by a given amount during formation of the

first and second data streams and the the symbol error signal is delayed by the given amount before comparison with the second data stream.